

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,676	01	7/23/2003	Robert A. Benson	705658US1	1092
24938	7590 01/24/2006			EXAMINER	
DAIMLER	CHRYSL	ER INTELLECT	BINDA, GREGORY JOHN		
CIMS 483-02 800 CHRYS		AST	ART UNIT	PAPER NUMBER	
AUBURN H	ILLS, MI	48326-2757	3679		

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		10/625,676	BENSON ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Greg Binda	3679				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
2a)⊠	 Responsive to communication(s) filed on 12 September 2005 and 22 November 2005. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. 						
Dispositi	ion of Claims						
5)□ 6)⊠ 7)⊠	Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) 7 and 8 is/are withdra Claim(s) is/are allowed. Claim(s) 1-6,9,10 and 12-14 is/are rejected. Claim(s) 11 is/are objected to. Claim(s) are subject to restriction and/or	awn from consideration.					
Application Papers							
10)⊠	The specification is objected to by the Examine. The drawing(s) filed on 23 July 2003 is/are: a) [2] Applicant may not request that any objection to the calculation of the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine.	☑ accepted or b)☐ objected to be drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority (ınder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2) Notice 3) Information	t(s) te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) tr No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 3679

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

2. Claims 7 & 8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election of Species I shown in Figs. 1-3 was made without traverse in the reply filed on April 26, 2005.

Claim Objections

3. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-6 & 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites the limitation, "a diaphragm seal in said housing forming a single wall"

Application/Control Number: 10/625,676 Page 3

Art Unit: 3679

of said chamber" in line 4. Applicant has not pointed out where this limitation is supported, nor does there appear to be a written description of the limitation in the application as originally filed..

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 7. Claims 1-6, 9 & 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. Claim 1, line 4 has been amended to recite the limitation, "a diaphragm seal . . . forming a single wall". It is not clear how "a single wall" differentiates from the previous manner in which the limitation was expressed, "a wall". Nor is it clear how the multiple corrugations 52-56 of the diaphragm seal 46 constitute a single wall if, as applicant argues in the amendment filed September 12, 2005, similar multiple corrugations in the diaphragm seal 27 of Fisher et al preclude that seal from reading on the limitation.
 - b. Claims 12 & 13 each recite the diaphragm seal includes a "sheet". It is not clear if this sheet is the same as, or different from the sheet recited at line 9 of claim 10.

Claim Rejections - 35 USC § 102

8. Claims 1-3 & 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Orain, US 3,817,057. Fig. 1 shows a universal joint assembly having a housing 21, a universal joint (see

Application/Control Number: 10/625,676

Art Unit: 3679

"universal joints" at col. 1, line 6) in a chamber within the housing, and a boot 10-15 at one end the universal joint assembly, the assembly comprising: a flexible diaphragm seal 20 in the housing forming a single wall of the chamber. Fig. 1 shows the diaphragm seal 20 is (1) supported by a supporting ring 7, and (2) separates the chamber from a vent space that includes a vent hole 27. In col. 2. lines 38 & 39, Orain discloses that the diaphragm seal is made from a sinuous sheet of elastomeric material (see "elastomer reinforced with cloth").

Page 4

Quite 10 & 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Fisher et al, US 3,858,412 (Fisher). Fig. 1 shows a universal joint assembly having a housing (outer element 10 and the unnumbered cover attached at the right end of the outer element 10), and a universal joint (see the title) in a chamber within the housing, the assembly comprising: a diaphragm seal 27 in said housing forming a wall of said chamber; the chamber being sealed substantially to exclude foreign elements; the diaphragm seal being flexible to allow expansion and contraction of the chamber to prevent any substantial increase or decrease in the pressure within the chamber; and the diaphragm seal including a flexible sheet having a plurality of concentric annular circular portions of progressively increasing radius, alternate circular portions (see the radially innermost and outermost portions) having a generally U-shaped cross section opening toward the chamber and remaining circular portions (see the radially intermediate portion) having a generally U-shaped cross section opening away from the chamber.

Allowable Subject Matter

10. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

- 11. Applicant's arguments filed September 12 and November 22 2005 have been fully considered but they are not persuasive.
 - a. Applicant argues that Orain fails to show all the limitations of claim 1 because it supposedly fails to show a diaphragm seal forming a single wall of the chamber.
 However, Fig. 1 in Orain clearly shows the diaphragm wall 20 forms a single wall of the chamber.
 - b. Applicant failed to argue how claims 10 & 12-14 are patentable over the prior art to Fisher.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Application/Control Number: 10/625,676 Page 6

Art Unit: 3679

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Greg Binda Primary Examiner

Art Unit 3679